TURNING CENTRES

ROMI GL SERIES

NEW GENERATION

GL 300M

ROMI

MUCH MORE PRODUCTIVITY AND PROFITABILITY FOR YOUR BUSINESS!

*In the constant transformation of industrial processes, it is crucial to have **differentials that make your products superior to those offered by competitors.***

*In this context, the insertion of new technologies in its production process, mainly by means of **modern, fast and precise machine tools, raises production performance.***

You get higher quality, productivity, efficiency and the best: higher profits than already achieved in your business!

With more than 90 years of history and global presence, we have preserved the values that have made our products recognised worldwide. **We offer the most cost-effective machine tools on the market.** Our commitment to the constant development of new solutions and dedication to innovation, results in robust, high technology and quality machine tools.

We guarantee full support at all stages of purchase through our sales and sales engineering teams, customer training, specialised technical assistance and spare parts.

Having a Romi machine tool assures that you have state of the art equipment combined with a reputation of value, providing a high resale value in the future.

At Romi, you get a complete solution, much more than just a piece of equipment: y**ou have the security and tranquility of counting on the manufacturer at all times, whenever you need it.** Count on us to find a solution that fits your needs. **Our main goal is to make your business even more productive and profitable.**

Ultra Clean room
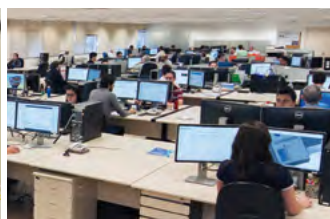
R & D

Flexible Manufacturing System (FMS)

Specialised technical assistance

Training

Spare parts

ROMI GL SERIES

NEW GENERATION

High productivity with robustness, precision and technology

Designed to operate in environments of medium and high production, the **ROMI GL Series** has high power and torque. Its robust structure is ideal for machining at full power. It offers high rigidity even during severe machining operations. Thermal and geometric stability, grants accuracy, high performance and productivity.

ROMI GL 250

Headstock	6,000 or 4,500 rpm
Spindle nose	ASA A2-5" or A2-6"
Main motor	19.4 cv / 14.3 kW
Max. turning diameter*	up to 282mm (11")
Rapid traverse X/Z	30m/min (1,18in/min)

ROMI GL 300

Headstock	4,500 or 3,500 rpm
Spindle nose	ASA A2-6" or A2-8"
Main motor	25.2 hp / 18.5 kW
Max. turning diameter*	up to 330mm (13")
Rapid traverse X/Z	30m/min (1,18in/min)

ROMI GL 350

Headstock	3,000 or 2,500 rpm
Spindle nose	ASA A2-8" or A2-11"
Main motor	34 hp / 25 kW
Max. turning diameter*	up to 410mm (16")
Rapid traverse X/Z	30m/min (1,18in/min)

ROMI GL 450

Headstock	3,000 or 2,500 rpm
Spindle nose	ASA A2-8" or A2-11"
Main motor	40.8 hp / 30 kW
Max. turning diameter*	up to 490mm (19.3")
Rapid traverse X/Z	30m/min (1,18in/min)

STRUCTURE

ROBUSTNESS AND TECHNOLOGY

The quality of the manufacturing processes grants reliability and operational efficiency of ROMI machines.

Projected in 3D CAD system, the entire structure of the **ROMI GL SERIES** is dimensioned by Finite Element Analysis software (FEA), resulting in adequate structures for each machine size.
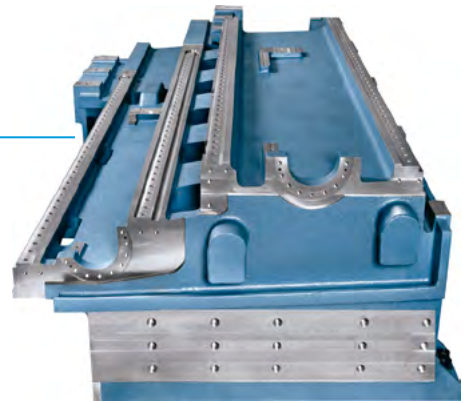
The benefits of Linear Guides

- Rapid traverse speeds up to 30 m/min
- Fast positioning of axes minimizing idle times and increasing productivity
- Allows high accelerations
- Low lubricant consumption
- Easy maintenance
- High rigidity and long durability

THERMAL COMPENSATION

System developed to reduce the effects of thermal expansion.
In this way, stable, dimensional results are obtained even during long working periods.

1 **MONOBLOCK BASE,** robust and designed to absorb vibrations; offers better parts finishing, longer durability for machine and cutting tools.

2 **LINEAR GUIDES** allow fast displacements, great rigidity, great movement accuracy and positioning of the axis due to low friction coefficient between rails and blocks.

3 **BALL SCREWS** are hardened and ground with preloaded nuts; designed to offer high rigidity, high accuracy in both positioning and repeatability of axes.

4 **Brushless AC SERVOMOTORS** with integrated absolute encoders, which transmit the movement of the ball screws directly, providing accurate positioning and excellent repeatability of axes.

HEADSTOCK

HIGH PERFORMANCE AND PRECISION

Offers huge power and torque; has a cooling system which brings great thermal and geometric stability to the assembly. High precision spindle is designed to withstand high machining forces and high speeds with continuous variation.

HEADSTOCK WITH BUILT-IN MOTOR

The headstock with built-in motor is a compact system compared to the conventional headstock. It is comprised of a motor incorporated to the spindle cartridge, where the rotor is fixed to the spindle and the stator is fixed in the housing.

Coolant system channels
Stator
Rotor
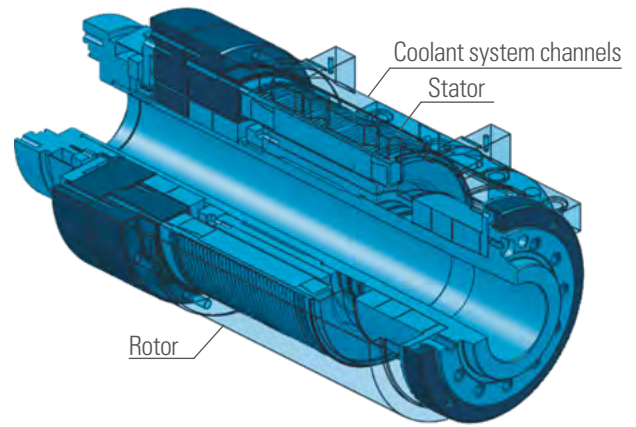
Benefits

- High torque in low rotations
- Excellent level of power and performance
- High stability system, without vibrations due to the absence of pulleys and belts
- Excellent spindle run-out which contributes to obtaining great surface finishing and roundness on turning operations

- Low inertia contributing to high accelerations
- Incorporated high resolution encoder assuring extreme precise angular positioning (C axis) for operations with driven tools (for versions with driven tools)
- Offers high thermal and geometric stability of the assembly due to its efficient cooling system
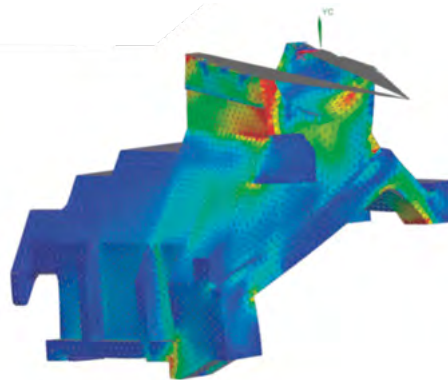
Structure that offers excellent thermal and geometric stability, rigidity and high capacity to absorb machining efforts, even in heavy duty machining conditions.

FRONTAL ARRANGEMENT OF ROLLER BEARINGS and angular ball bearings; rear arrangement of high-precision angular contact ball bearings with permanent lubrication.

BEARINGS sealing by labyrinths.

COOLING SYSTEM guided by a closed circuit through channels located in a labyrinth between the outer surface of the stator and the housing, dissipating the heat generated by the built-in motor. The liquid first passes through a heat exchanger. There it is cooled and then returned to the headstock. The system is monitored by a flow sensor. This ensures that the headstock is always cooled.
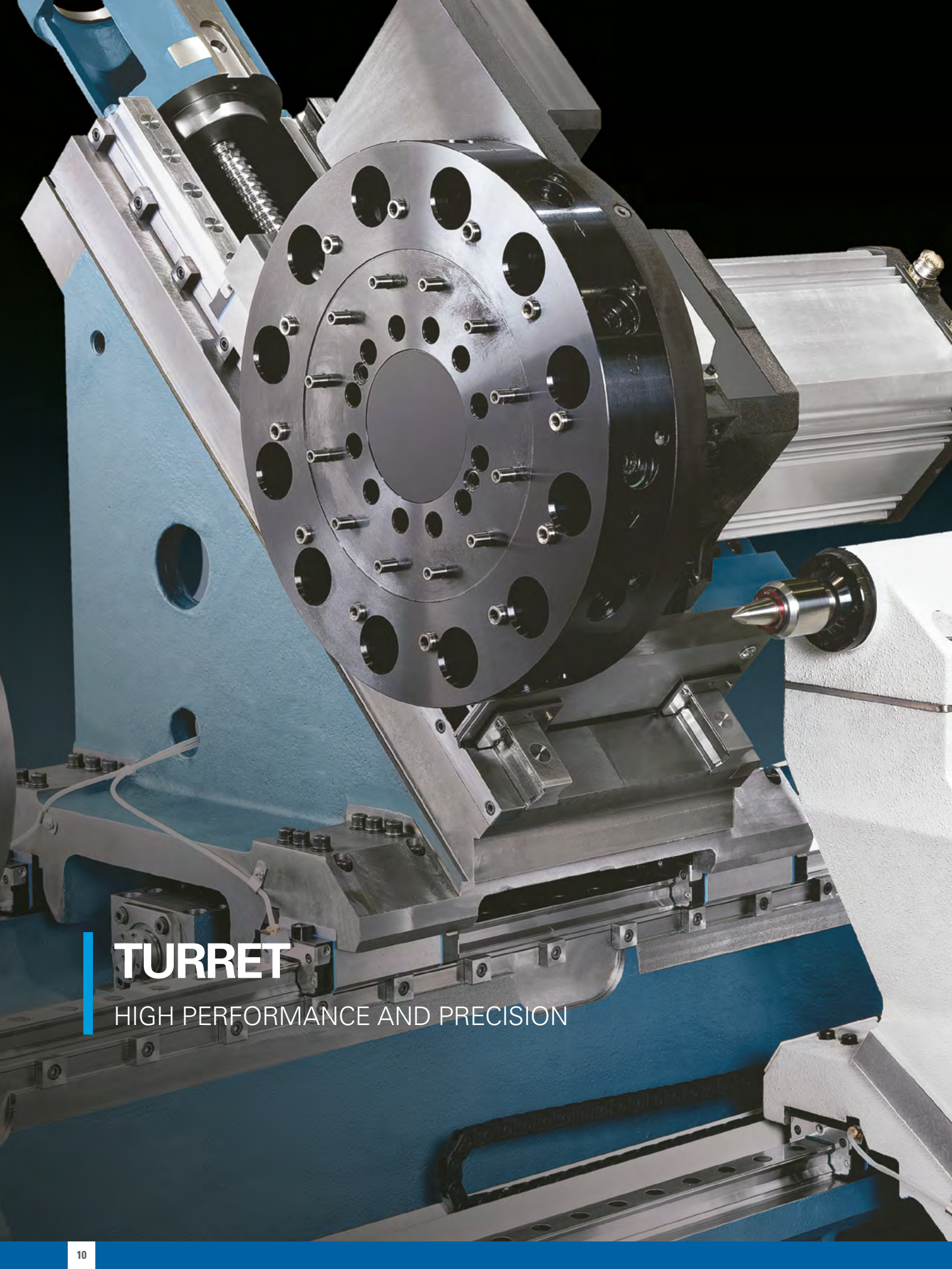
TURRET
HIGH PERFORMANCE AND PRECISION

12-station turret for fixed tools, with Romi disk

12-station turret for driven tools, with VDI- or BMT disk*

12-station turret for driven tools with Y Axis

◀ Y AXIS

Enables turning operations out of workpiece centre line allowing drilling, milling and tapping operations with only one fixation.

*see specifications for each version

SECOND
HEADSTOCK

TAILSTOCK

TAILSTOCK

Tailstock supported on high precision linear guides. Positioning and axial force adjustable via CNC. Prepared for cartridge with MT-4 or built-in live centre (with incorporated bearings).*
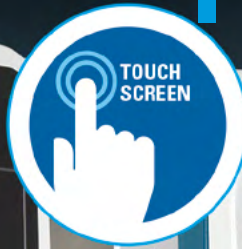
SECOND HEADSTOCK ▶

The headstock with built-in motor is a compact system compared to the conventional headstock. It is comprised of a motor incorporated to the spindle cartridge, where the rotor is fixed to the spindle and the stator is fixed in the housing (with half-pass or total pass of 51 mm).

*see specifications for each version

CNC

TECHNOLOGY AND RELIABILITY

TOUCH SCREEN

CNC Fanuc 32i-B Plus *i*-HMI (for S versions) with 19" Touchscreen LED color monitor

CNC Fanuc 0i-TF Plus *i*-HMI (for T, M and Y versions) with 15" Touchscreen LED color monitor

ROMI GL Series Turning Centres are equipped with Fanuc CNC, which facilitates programming, with main screen with separate areas for planning, machining, improvements and utilities, allowing access to functions in just only two clicks. It is equipped with Ethernet interface, drive for Compact Flash card and USB port.


1. Display of various information on a single screen. E.g.: feed axes and main spindle load indicators, ongoing program, modal codes, tool information, icons, alarms, etc.

**2.** Complete and dynamic tool manager, enabling quick access to information.

3. Functions for corrective, preventive and predictive maintenance (messages, alarms, message history, etc.). Warning messages are generated before the fault even occurs. This enables efficient preventive maintenance.
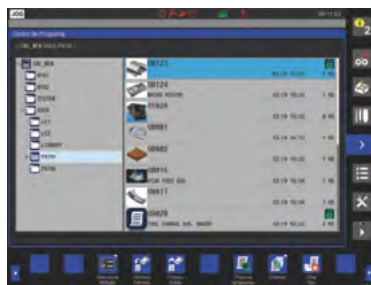
4. The machining programs can be easily accessed, they are organized in a folder structure with illustration of the workpiece, program name and number for easy identification.

5. Thanks to the compatibility with numerous file formats, manuals, diagrams and other important information can be stored.
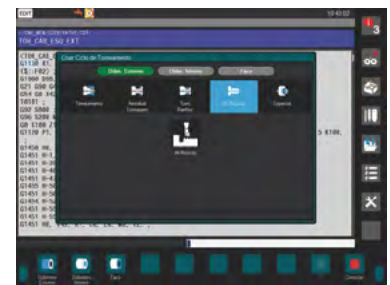
6. Various interactive machining cycles: cavity cycles, milling, tapping, measurements, etc.

OPTIONAL EQUIPMENT
VERSATILITY FOR YOUR PRODUCTION

Thanks to the large selection of optional equipment, we can perfectly adapt your ROMI GL Turning Centre to your individual requirements and thus make it even more versatile.

1. Automatic Door and Safety Light Curtain
2. Chip Conveyor
3. Mist Exhausting System
4. Wash Gun
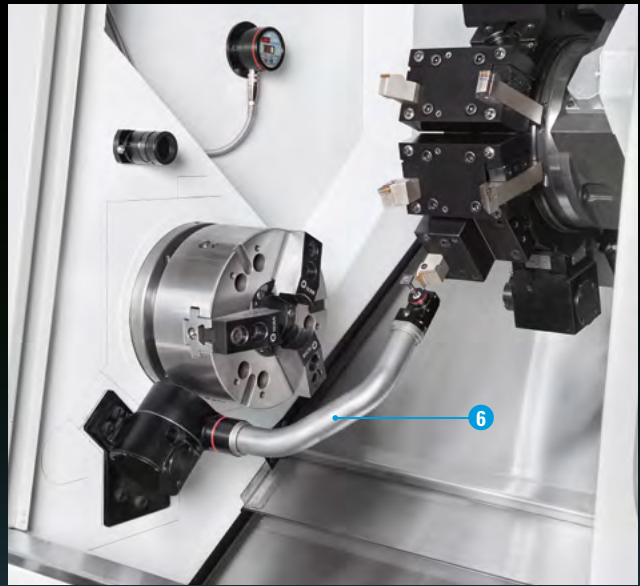**5.** Parts Catcher
6. Tool Position Reader

Chip conveyors (optionals)

Model	Types of chips		Material			
	Curled or long chips	Short thin chips	Steel	Aluminum	Non-ferrous metals (bronze and brass)	Cast iron
TCE (Longitudinal Hinged belt chip conveyor)	◉	X	◉	X	X	X
TCA (Longitudinal Drag belt chip conveyor)	X	◉	○	○	○	○

◉ **Fully indicated**   ○ **Partly indicated**   ✗ **Not indicated**

TCA: chips smaller than 0.5 mm may contaminate the coolant tank and require frequent cleaning / chip clusters or chips larger than 50 mm may lock the conveyor
TCE: short chips smaller than 5 mm may contaminate the coolant tank and require frequent cleaning

GL 300S

ROMI

Technical Specifications		ROMI GL 250	ROMI GL 300	ROMI GL 350	ROMI GL 450
Capacity					
Maximum cutting diameter	mm (in)	T = 282 (11) M, Y and S = 250 (9.8)	T = 330 (13) M, Y and S = 300 (11.8)	T = 410 (16.1) M and Y = 350 (13.7)	T = 490 (19.3) M and Y = 450 (17.7)
Swing diameter over Z axis cover	mm (in)	530 (20.8)	530 (20.8)	660 (26)	660 (26)
Swing diameter over X table	mm (in)	420 (16.5)	420 (16.5)	530 (20.8)	530 (20.8)
Swing diameter over Y table (with Y=0)	mm (in)	400 (15.7)	400 (15.7)	500 (19.7)	500 (19.7)
Travel (X Axis)	mm (in)	T, Y and S = 160 (6.3) / M = 195 (7.7)	T, Y and S = 185 (7.3) / M = 230 (9)	230 (9)	255 (10)
Travel (Z Axis)	mm (in)	600 (23.6)	600 (23.6)	1,200 (47.2)	1,200 (47.2)
Travel (Y Axis)	mm (in)	± 50 (1.97)	± 50 (1.97)	± 75 (3)	± 75 (3)
Travel (tailstock or second headstock)	mm (in)	540 (21.2)	540 (21.2)	1,160 (45.7)	1,160 (45.7)
Headstock					
Type		built-in			
Spindle nose	ASA	A2-5" / A2-6"	A2-6" / A2-8"	A2-8" / A2-11"	
Spindle hole diameter	mm (in)	61 (2.4) / 73 (2.9)	73 (2.9) / 85 (3.35)	104 (4.1) / 116 (4.56)	
Chuck diameter	mm (in)	165, 175 or 210 / 210 (6.5, 6.9 or 8.3 / 8.3)	210 or 254 / 254 (8.3 or 10 / 10)	254 or 315 / 315, 390 or 450 (10 or 12.4 / 12.4, 15.3 or 17.7)	
Maximum bar capacity	mm (in)	42 or 51 / 51 or 64 (1.65 or 2 / 2 or 2.5)	51 or 64 / 64 or 76 (2 or 2.5 / 2.5 or 3)	76 or 89 / 89 or 102 (3 or 3.5 / 3.5 or 4)	
Speed range	rpm	6,000 / 4,500	4,500 / 3,500	3,000 / 2,500	
Second Headstock					
Type		built-in			
Spindle nose	ASA	A2-5"			
Spindle hole diameter	mm (in)	61 (2,4)			
Chuck diameter	mm (in)	165, 175 or 210 (6.5, 6.9 or 8.3)			
Maximum bar capacity	mm (in)	51 (2)			
Speed range	rpm	6,000			
Feeds					
Rapid traverse - X axis	m/min (in/min)	30 (1,181)			
Rapid traverse - Z axis	m/min (in/min)	30 (1,181)			
Rapid traverse - Y axis	m/min (in/min)	18 (708)			
Rapid traverse - W axis (tailstock or second headstock)	m/min (in/min)	T, M, Y = 10 (393) / S = 18 (708)		10 (393)	
Turret					
Number of tools / stations	pc.	12			
Tool section: square	mm (in)	20 x 20 (3/4" x 3/4")	25 x 25 (1" x 1")	25 x 25 (1" x 1")	25 x 25 (1" x 1")
T Turret (for fixed tools)					
Tool holder	type	Romi			
Tool section: bar	mm (in)	Ø 32 (1 1/4")	Ø 40 (1 1/2")	Ø 40 (1 1/2")	Ø 50 (2")
M or T Turret (for driven tools)					
Tool holder	type	M: VDI 30 / Y: BMT-45	M: VDI 40 / Y: BMT-55	BMT 65	BMT 75
Tool section: bar	mm	Ø 32 (1 1/4")	Ø 40 (1 1/2")	Ø 40 (1 1/2")	Ø 50 (2")
Axial/radial driven tool holder	DIN 6499	M: ER-25 (Ø1 - Ø16mm) Y: ER-20 (Ø1 - Ø13mm)	M: ER-32 (Ø2 - Ø20mm) Y: ER-25 (Ø1 - Ø16mm)	ER-32 (Ø2 - Ø20mm)	ER-40 (Ø3 - Ø26mm)
Speed range for driven tool	rpm	0 ~ 6,000	0 ~ 4,000	0 ~ 4,000	0 ~ 4,000
Minimum allowed motor torque (continuum regime)	Nm	18	30	30	40
Y Turret (for driven tools) for S versions (with counter spindle)					
Tool holder	type	BMT 45	BMT 55	-	-
Tool section: bar	mm (in)	Ø 32 (1 1/4")	Ø 40 (1 1/2")	-	-
Axial/radial driven tool holder	DIN 6499	ER-20 (Ø1 - Ø16mm)	ER-25 (Ø1 - Ø16mm)	-	-
Speed range for driven tool	rpm	0 ~ 6,000	0 ~ 4,000	-	-
Minimum allowed motor torque (continuum regime)	Nm	18	30	-	-
Automatic tailstock (servodriven)					
Taper hole for body positioning		MT-4	MT-4	built-in	built-in
Maximum axial force	kgf	300	500	700	1,000
Power					
AC Main motor (intermittent regime - built-in)	hp / kW	19.4 / 14.3	25.2 / 18.5	34 / 25	40.8 / 30
AC Right motor (intermittent regime - built-in)	hp / kW	19.4 / 14.3	19.4 / 14.3	19.4 / 14.3	19.4 / 14.3
Total installed power (T/M and Y versions)	kVA	30	40	45	50
Total installed power (S versions)	kVA	45	50	-	-
Dimensions and weights (approx.)					
Machine weight (without chip conveyor)*	kg (lbs)	4,800	5,200	7,300	7,700

		GL 250 / GL 300		GL 350 / GL 450	
		T and M versions	**Y and S versions**	**T and M versions**	**Y versions**
Height	mm (in)	2,009 (79)	2,235 (88)	2,270 (89.3)	2,350
Area (front x side) (*)	mm (in)	2,927 x 2,019 (115 x 79)	3,901 x 2,268 (153 x 89)	4,230 x 2,360 (166.5 x 92.9)	4,390 x 2,523 (172.8 x 99.3)

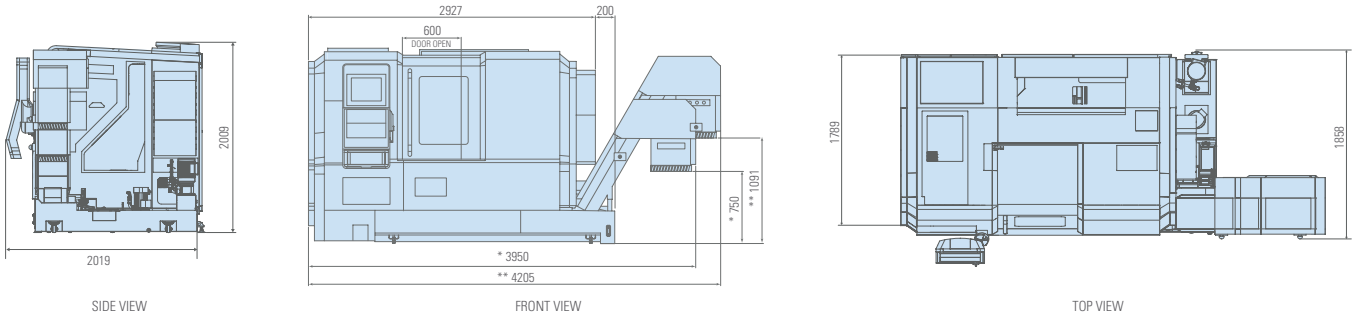*without chip conveyor

Standard equipment

- Headstock with built-in motor ASA A2-5" (GL 250)
- Headstock with built-in motor ASA A2-6" (GL 250 or GL 300)
- Headstock with built-in motor ASA A2-8" (GL 300, GL 350 or GL 450)
- Headstock with built-in motor ASA A2-11" (GL 350 or GL 450)
- Second Spindle with built-in motor ASA A2-5" (S versions)
- Travel (X axis) and travel (Z axis) are supported on linear guides, AC servomotor driven, with direct drive transmission by means of pre-loaded ball screws (T and M versions)
- Travel (X axis), lower travel (Z axis) and upper travel (X' axis) are supported on linear guides, AC servomotor driven, with direct drive transmission by means of pre-loaded ball screws (Y versions)
- Travel (X axis), lower travel (Z axis), upper travel (X' axis) and counter spindle (W axis) are supported on linear guides, AC servomotor driven, with direct drive transmission by means of pre-loaded ball screws (S versions)
- Thermal Compensation
- Tailstock with long MT-4 live center, supported
- on linear guides, AC servodriven, with direct drive transmission by means of pre-loaded ball screws and anti-impact system (T, M and Y versions)
- Fanuc 0i-TF Plus i-HMI CNC with 15" Touchscreen LED colour monitor and integrated safety system (for T, M and Y versions)
- Fanuc 32i-B Plus i-HMI CNC with 19" Touchscreen LED colour monitor and integrated safety system (for S versions)
- Fully enclosed splash guard with interlocked sliding safety door
- Cleaning system for main and second spindle jaw chucks (S versions)
- Complete documentation for ROMI product
- Electrical installation available for the following voltage/frequencies: 400 Vca, 50 / 60 Hz
- Set of wrenches for machine operation
- Set of levelling screws and nuts
- Worklight LED type
- Electrical cabinet with centrifugal air conditioning and positive pressure
- Automatic lubrication system with line filter and oil level sensor
- Coolant system with tank capacity and four
- coolant pumps available (5, 7, 15 or 30 bar), with derivation through mechanical valve for cover cleaning
- 12-station servodriven Duplomatic turret, with horizontal axis, hydraulically clamped, available with Romi disc and basic tool set (T versions)
- 12-station servodriven Duplomatic turret, with horizontal axis, hydraulically clamped, available with VDI disk and basic tool set (GL 250 M and GL 300 M)
- 12-station servodriven Duplomatic turret, with horizontal axis, hydraulically clamped, available with BMT disk and basic tool set (GL 350M, GL 450M and all Y and S versions)
- Hydraulic power unit with maximum pressure of 50 bar, 10,2 / 12,4 l/min flow rate in 50 / 60 Hz, supply volume of 41 liters, pressure control circuit for clamping device, fixed pump controlled by frequency inverter and pressure control through proportional valves and pressure transducersvalvulas proporcionais e transdutores de pressão
- Standard colours: Texturized Epoxy Enamel Munsell Blue 10B-3/4 and Texturized Epoxy Gray RAL 7035

Optional equipment

- Longitudinal hinged belt swarf conveyor (TCE): high (1,090 mm distance from conveyor outlet to floor) or low (750 mm distance from conveyor outlet to floor), and coolant tank
- Longitudinal drag belt swarf conveyor (TCA): high (1,090 mm distance from conveyor outlet to floor) or low (750 mm distance from conveyor outlet to floor), and coolant tank
- Hydraulic steady rest with diameters of 165 mm (Ø 42 mm bar capacity), 175 mm (Ø 51 mm bar capacity), 210 mm (Ø 51 or Ø 64 mm bar capacity), 254 mm (Ø 64, Ø 76 or Ø 90 mm bar capacity) and 315, 390 and 450 mm (Ø 76, Ø 89 or Ø 102 mm bar capacity) - according to headstock version
- Collet chuck C42 (Ø 42 mm bar capacity), C60 (Ø 60 mm bar capacity) or C80 (Ø 60 mm, Ø 64 mm or Ø 76 mm bar capacity) - according to headstock/machine version
- Hydraulic cylinder and draw bar with Ø 42 mm, Ø 51 mm, Ø 64 mm, Ø 76 mm, Ø 89 mm or Ø 102 mm bar capacity - according to headstock version
- Collet chuck in addition to hydraulic chuck C42 (Ø 42 mm bar capacity), C60 (Ø 51 mm or Ø 60 bar capacity) or C80 (Ø 64 mm or Ø 76 mm bar capacity) - according to headstock/machine version
- Automatic machine power off after shift end / program end / bar end / part end (Auto power off)
- M code for external interface with 3 pairs of M codes (3 independent outputs - 3 Ms code enable and 3 Ms code disable) ©
- LED Status light indicator (3 colors)

- Automatic door with light barrier and gear motor controlled by frequency inverter ©
- Tool setter (C)
- Pneumatic cleaning system of jaw chucks (A)
- Remote diagnosis interface via cable (C)
- Remote operation panel with handwheel and JOG functions for axes
- Ethernet Data-Server with integrated PCMCIA 4 or 16 GB card capacity
- Headstock parts catcher with Ø76 mm x 220 mm x 2.5 kg max. capacity (C)
- Second headstock parts catcher with Ø76 mm x 180 mm x 2.5 kg max. capacity (C)
- Oil/coolant separator (oil skimmer), disc type, with waste collection container
- Mist exhausting system (C)
- Smoke filter (G)
- Bar feeder device FEDEK DH 65L S (D)
- Bar feeder interface (C)
- Modular bar guide tubes for Ø 42 mm, Ø 51 mm, Ø 64 mm or Ø 76 mm bar capacity (according to the spindle bore)
- Nylon discs set (blind) for Ø 42 mm, Ø 51 mm, Ø 64 mm and Ø 76 mm bar guide (according to machine spindle bore)
- Air conditioning for electrical cabinet (recommended for environments with temperature over 38 ºC)
- Autotransformer for 220 Vca, 200 / 250 Vca or 360 / 480 Vca (E)
- Electric and electronic interface (B)
- Basic pneumatic kit (F)
- Foot switch for fixing device starting (right and/or left counter spindle)
- Foot switch for tailstock starting

- Coolant pump 5, 7, 15 or 30 bar
- Wash gun with additional 5 bar motor pump
- Long or short CM-4 live center
- Linear scale (optical scale) for Z or X axis (A)
- Hydraulic steady and follow rest with programmable positioning (A)
- Additional set of ROMI product manuals in digital version
- Additional set of ROMI product manuals in print version
- Spare parts: jaw chuck sets, clamping collets, tool holders, reduction sleeves, bar puller and limiter

(A) Must purchase also the accessory: "Basic pneumatic kit".
(B) Contains the following parts: "Mist exhausting system", "Automatic door with light barrier and gear motor controlled by frequency inverter", "Bar feeder interface", "M code external interface with 3 pairs", "Tool setter", "Parts catcher", "Remote diagnosis interface: cable", "Measure / inspection of parts".
(C) Must purchase also the accessory: "Electric and electronic interface".
(D) Must purchase also the accessory: "Bar feeder interface". The accessories: "Modular guide tube" and "Nylon discs set" are not included in the delivery and must be bought separately.
(E) Only for power supply with voltage different than 380 Vca.
(F) Contains the following parts: "Pneumatic cleaning system of jaw chucks" and "Linear scale".
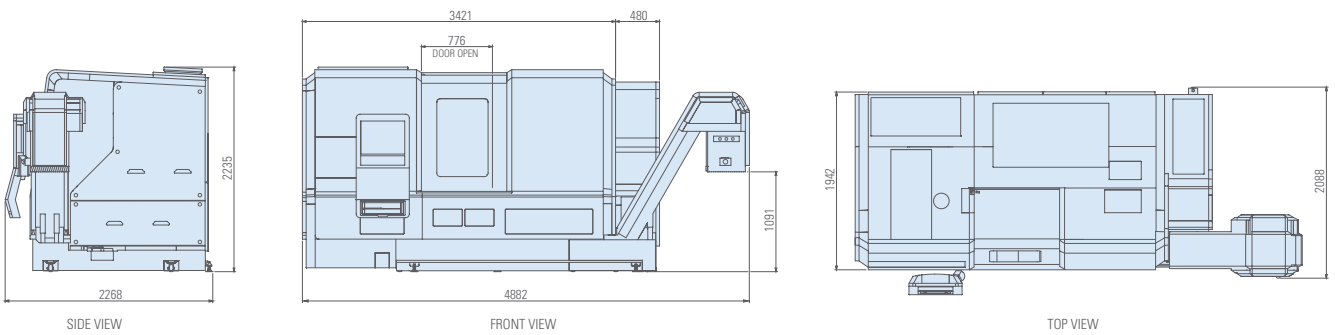**(G)** Must purchase also the accessory: "Mist exhausting system".

ROMI GL 250 / GL 250M / GL 300 / GL 300M

2927
200
600
DOOR OPEN
2009
2019
SIDE VIEW

* 750
** 1091
1091
* 3950
** 4205
FRONT VIEW

1789
1858
TOP VIEW

*Smaller layout swarf conveyor / ** Larger layout swarf conveyor

ROMI GL 250Y / GL 250S / GL 300Y / GL 300S

3421
480
776
DOOR OPEN
2235
2268
SIDE VIEW

1091
4882
FRONT VIEW

1942
2088
TOP VIEW

ROMI GL 350 / GL 350M / GL 450 / GL 450M

4230
1270
DOOR OPEN
2270
2360
SIDE VIEW

1090
5720
FRONT VIEW

2000
2050
TOP VIEW

ROMI GL 350Y / GL 450Y

4390
1270
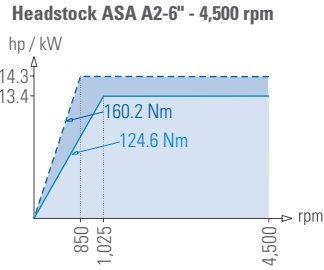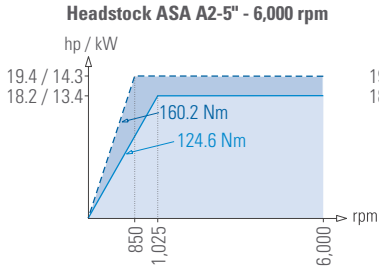DOOR OPEN
2350
2523
SIDE VIEW

1080
5880
FRONT VIEW

2163
2213
TOP VIEW
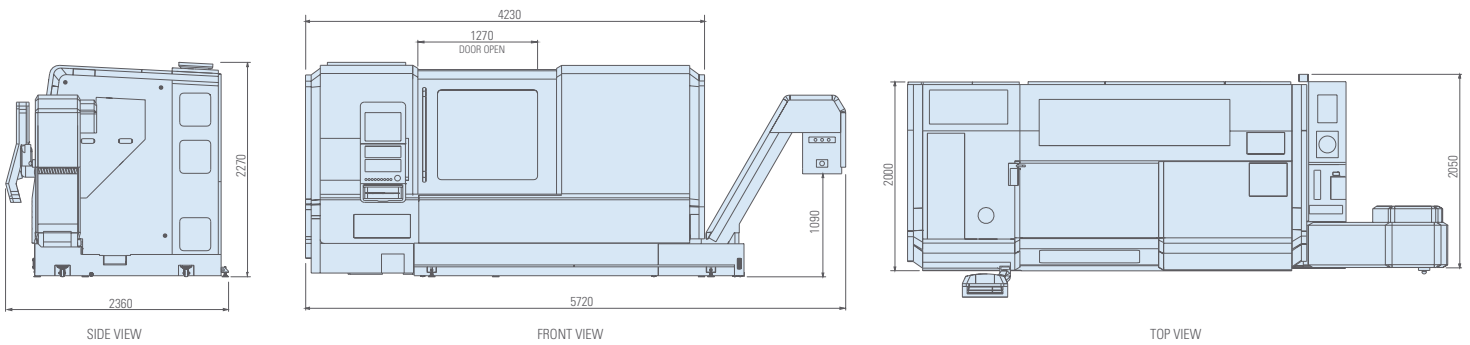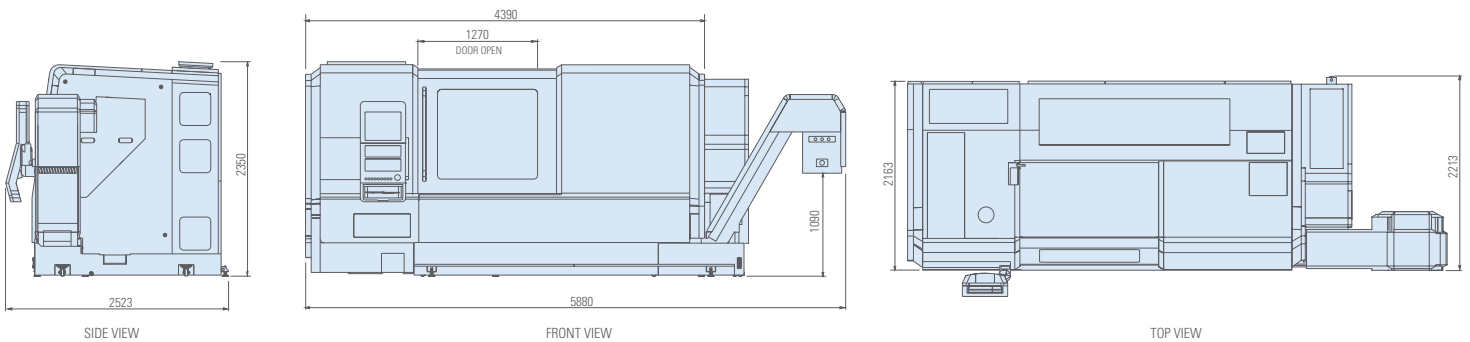
Designs are not in scale

Power graphs

ROMI GL 250

Headstock ASA A2-5" - 6,000 rpm

hp / kW

19.4 / 14.3
18.2 / 13.4

160.2 Nm
124.6 Nm

850 · 1,025 · 6,000 · rpm

Headstock ASA A2-6" - 4,500 rpm

hp / kW

19.4 / 14.3
18.2 / 13.4

160.2 Nm
124.6 Nm

850 · 1,025 · 4,500 · rpm

ROMI GL 300

Headstock ASA A2-6" - 4,500 rpm

hp / kW

25.2 / 18.5

327.3 Nm
238.2 Nm

540 · 742 · 4,500 · rpm

Headstock ASA A2-8" - 3,500 rpm

hp / kW

25.2 / 18.5

327.3 Nm
238.2 Nm

540 · 742 · 3,500 · rpm

ROMI GL 350

Headstock ASA A2-8" - 3,000 rpm

hp / kW

34 / 25

880.5 Nm
616.2 Nm

271 · 388 · 3,000 · rpm

Headstock ASA A2-11" - 2,500 rpm

hp / kW

34 / 25

880.5 Nm
616.2 Nm

271 · 388 · 2,500 · rpm

ROMI GL 450

Headstock ASA A2-8" - 3,000 rpm

hp / kW

40.8 / 30

880.5 Nm
616.2 Nm

326 · 465 · 3,000 · rpm

Headstock ASA A2-11" - 2,500 rpm

hp / kW

40.8 / 30

880.5 Nm
616.2 Nm

326 · 465 · 2,500 · rpm

■ Continuous regime S1   ⬚ Intermittent regime S6-40%

DRIVEN TOOL

ROMI GL 250

hp / kW

6 / 4.5

18 Nm

3,500 · 6,000 · rpm

ROMI GL 300 / GL 350

hp / kW

7.5 / 5.5

30 Nm

3,000 · 4,000 · rpm

ROMI GL 450

hp / kW

7.5 / 5.5

30 Nm

3,000 · 4,000 · rpm
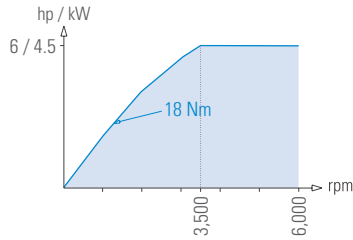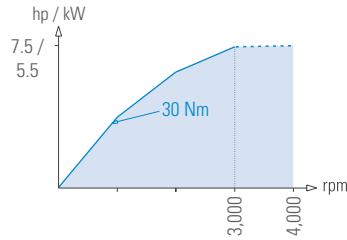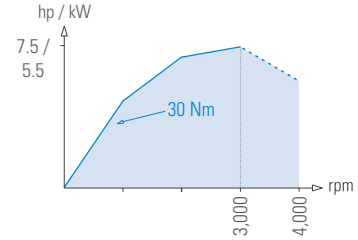
■ Continuous regime S1   ⬚ Intermittent regime S2-30 min

Graphics are not in scale

Capacities - dimensions in mm

A — Maximum Z Axis travel
B — Ø turning diameter
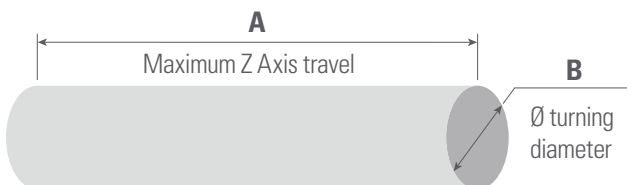
	A	B
ROMI GL 250	600	280
ROMI GL 250M / Y / S	600	250
ROMI GL 300	600	330
ROMI GL 300M / Y / S	600	300
ROMI GL 350	1200	410
ROMI GL 350M / Y	1200	350
ROMI GL 450	1200	490
ROMI GL 450M / Y	1200	450

CNC FANUC 0i-TF Plus i-HMI
ROMI GL 250 / GL 300 / GL 350 / GL 450
Versions T / M / Y

1 - Resources:
- 15" Touchscreen LED monitor
- Qwerty keyboard
- Operation panel
- Look-ahead blocks = 20
- Minimum Increment Positioning 0.001 mm or inches and 0.0001°
- Simultaneous control of up to 4 axes
- Stroke limit check before movement
- Linear Interpolation (G01)
- Circular Interpolation Multi-Quadrante (G02 and G03)
- Y Axis angular control (requires installed Y Axis)
- Data protection with 4 access levels
- PCMCIA Interface (SRAM card)
- Interface Ethernet Embedded 10Mb
- Interface USB
- Automatic data backup
- Programmed Codes (T, S, M, F)
- Parts number display
- Clock
- Machining cycle time (not available in DNC mode)
- Interpolated pitch error compensation
- "Bell-Shaped" acceleration/deceleration for rapid traverse
- Linear acceleration/deceleration after interpolation for rapid traverse
- Block overlay in rapid traverse
- Power Mate Manager
- Machine Lock
- Travel limit through software
- Interlocking
- Backlash compensation
- Languages (Portuguese, English, German, French, Italian, Spanish)
- Stylus (Touch pen)

2 - Programming Resources:
- Continuous Single Thread and Multi-entry (G33)
- Thread with spherical male thread
- Variable Pitch Thread (G34)
- Tool retract during thread cutting

- Programmable Return for up to 4 reference positions (G28, G30 e G53)
- Prevention of programming errors

3 – Feedrate Functions:
- Feed in mm/min or inches/min (G94)
- Feed per rotation, mm/rot or inches/rot (G95)
- Dwell time (G04)

4 - Graphic Functions:
- Machining graphic display – 2D
- Machining graphic display – 3D
- Removal of residual material

5 - Coordinate Systems:
- Local Coordinate System Setting (G52)
- Machine Coordinate System Selection (G53)
- Workpiece Coordinate System (G54~G59)
- Workpiece Coordinate Preset (G92, G92.1)
- Tool Geometry and Wear Compensation = 100

6 – Coordinate Values and Dimensions:
- Coordinate System Shift
- Programmable in Absolute Mode (G90) or Incremental Mode (G91)
- Inch/Metric Conversion (G20, G21)
- Coordinate System Rotation (requires installed Y axis)*
- Transfer Zero Point
- Mirror Image
- Programmable in radius or diameter
- Programmable Data Input (G10)

7 - Spindle Functions:
- C Axis Control
- Constant Surface Speed Control (G96)
- Spindle Speed Function in RPM (G97)
- Spindle Orientation (M19)
- Monitoring of current Spindle Speed
- Fixed position stop of active tool (Only for versions with driven tools)

8 - Applied Tool Functions:
- Tool Radius Compensation G40, G41 and G42
- Input Relative Corrector Tool [INPUT C]
- Direct Measurement of Corrector Tool
- Tool Life Management
- Screens for Tool Length Measurement – Manual i-HMI Mode

9 – Macro
- Macro B (User Macro)
- Addition to variables for Macro B

10 - Simplification Program Functions:
- Finishing Cycle (G70)
- Stock Removal in Turning (G71)
- Stock Removal in Milling (G72)
- Contour Machining (G73)
- Peck drilling along the Z axis (G74)
- Multi-entry Thread Cutting (G76)
- Multiple Repetitive Turning Cycle (Type II)
- Programming of dimensions directly from the drawing
- Drilling / boring (G83, G85)
- Rigid Tapping (M29 + G84, G88)
- Character engraving cycle (Only for versions with driven tools)

- Retraction for rigid tapping
- Cylindrical Interpolation (G07.1) (Only for versions with driven tools)
- Interpolation in Polar Coordinate (G12.1, G13.1)
- Polygon Turning (G50.2, G51.2) (Only for versions with driven tools)
- Thread Opening Cycle (G78)
- Milling cycle (G79)

11 - Programming Format:
- Programming Format Command ISO Fanuc-10 / 11
- Conversational Programming i-HMI
- Parameter Configuration

12 - Execution Operations:
- Number / Program Research
- Program Comments
- Sub-program Call
- MDI Operation ("Memory Data Input")
- Automatic Operation
- Block to block Operation
- Program Stop (M00)
- Optional Stop (M01)
- Omission Block ("/") and Omission Block Extension ("/")
- Restart during program execution
- DNC Function
- Program Test Function
- Dry Run Function
- Reset Axes
- Jump "High Speed Skip"
- Spindle Controller Speed Key
- Tool Return and Manual Intervention
- Family A, B and C (G Codes)
- Search Block "N" Program
- Extend Part Program Editing
- Background Editing
- Number of Programs in Memory (1000)
- Memory space assigned to the user = 2 Mbytes (5120 m of Tape)
- Manual Handle Feed (MPG)
- JOG Feed
- Key Speed Control of Spindle

13 - Maintenance Functions:
- Course Limits
- Security area for jaw chuck and center
- Emergency functions
- Alarm messages
- Alarm History
- Operating history
- Periodic Maintenance
- Analysis of behavior System of Servomechanism
- User support
- Diagnosis Screen
- Maintenance Screen
- Integrated Safety System via Dual Check Safety
- Power consumption monitoring

CNC FANUC 32i-B Plus i-HMI
ROMI GL 250 / GL 300
Version S

1 – Resources
- 19" Touchscreen LED monitor
- Qwerty keyboard
- Operation panel
- Stylus (Touch pen)
- Look-ahead blocks = 20
- Minimum Increment Positioning 0.001 mm or inches and 0.0001°
- Simultaneous control of up to 4 axes
- Stroke limit check before movement
- Linear Interpolation (G01)
- Circular Interpolation Multi-Quadrante (G02 and G03)
- Helical interpolation (G02 and G03 w/ X, Y, Z simultaneous)
- Y Axis (angular control)
- Data protection with 4 access levels
- PCMCIA Interface (SRAM card)
- Puncher Interface RS-232 (2 channels)*
- Interface Ethernet Embedded 10Mb
- Interface USB
- Automatic Data Backup
- Programmed Codes (T, S, M, F)
- Parts number display
- Clock
- Calculator
- Machining cycle time (not available in DNC mode)
- Interpolated pitch error compensation
- "Bell-Shaped" acceleration/deceleration for rapid traverse
- Linear acceleration/deceleration after interpolation of rapid traverse
- Block overlay in rapid traverse
- Power Mate Manager*
- Machine lock
- Travel limit through software
- Interlocking
- Backlash compensation
- Torque Limit Skip
- Languages (Portuguese, English, German, French, Italian, Spanish)
- Selection function for energy saving levels
- 19"* Anti-glare protective film

2 - Programming Resources:
- Thread Cutting
- Thread repair
- Programmable Return for up to 4 reference positions (G28, G30 e G53)
- Thread repair
- Thread with spherical male thread
- Variable Pitch Thread
- Tool retract during thread cutting
- Prevention of programming errors

3 – Feedrate Functions:
- Feed in mm/min or inches/min (G94)
- Feed per rotation, mm/rot or inches/rot (G95)
- Dwell time G04
- X / Z / Y axes linear scale*

4 - Graphic Functions:
- Machining graphic display – 2D
- Machining graphic display – 3D
- Removal of residual material

5 - Coordinate Systems:
- Local Coordinate System Setting (G52)
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- Coordinate System Shift
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- Coordinate System Rotation (requires Y axis installed)*
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- Mirror Image
- Programmable in radius or diameter
- Programmable Data Input (G10)

7 - Spindle Functions:
- C Axis Control
- Constant Surface Speed Control (G96)
- Spindle Speed Function in RPM (G97)
- Monitoring of current Spindle Speed
- Fixed position stop of active tool**
- Spindle synchronization

8 - Applied Tool Functions:
- Tool Radius Compensation G40, G41 and G42)
- Input Relative Corrector Tool [INPUT C]
- Direct Measurement of Corrector Tool
- Tool Life Management
- Screens for Tool Length Measurement – Manual i-HMI Mode

9 – Macro
- Macro B (User Macro)
- Addition to variables for Macro B
- Macro Executor
- Memory for application in "Macro Executor" and Fanuc Picture (Mb) = 6MB

10 - Simplification Program Functions:
- Finishing Cycle (G70)
- Peck drilling along the Z axis (G74)
- Programming of dimensions directly from the drawing
- Drilling / boring (G83, G85)
- Rigid Tapping (M29 + G84, G88)
- Retraction for rigid tapping
- Cylindrical Interpolation (G07.1)**
- Polar Coordinate Interpolation (G12.1, G13.1)
- Stock Removal in Turning (G71)
- Stock Removal in Milling (G72)
- Contour Machining (G73)
- Thread Opening with Multiple Entries (G76)
- Multiple Repetitive Turning Cycle (Type II)
- Character engraving cycle**
- Polygon Turning (G50.2, G51.2)**
- Thread Opening Cycle (G78)
- Milling cycle (G79)
- External / Internal Turning Cycle (G77)

11 - Programming Format:
- Programming Format Command ISO Fanuc-10 / 11
- Conversational Programming i-HMI
- Parameter Configuration

12 - Execution Operations:
- Number / Program Research
- Program Comments
- Sub-program Call
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- Number of Programs in Memory (1000)
- Memory space assigned to the user = 4 Mbytes (10240m of tape)
- Interface for Ethernet Data Server
- Manual Handle Feed (MPG)
- JOG Feed
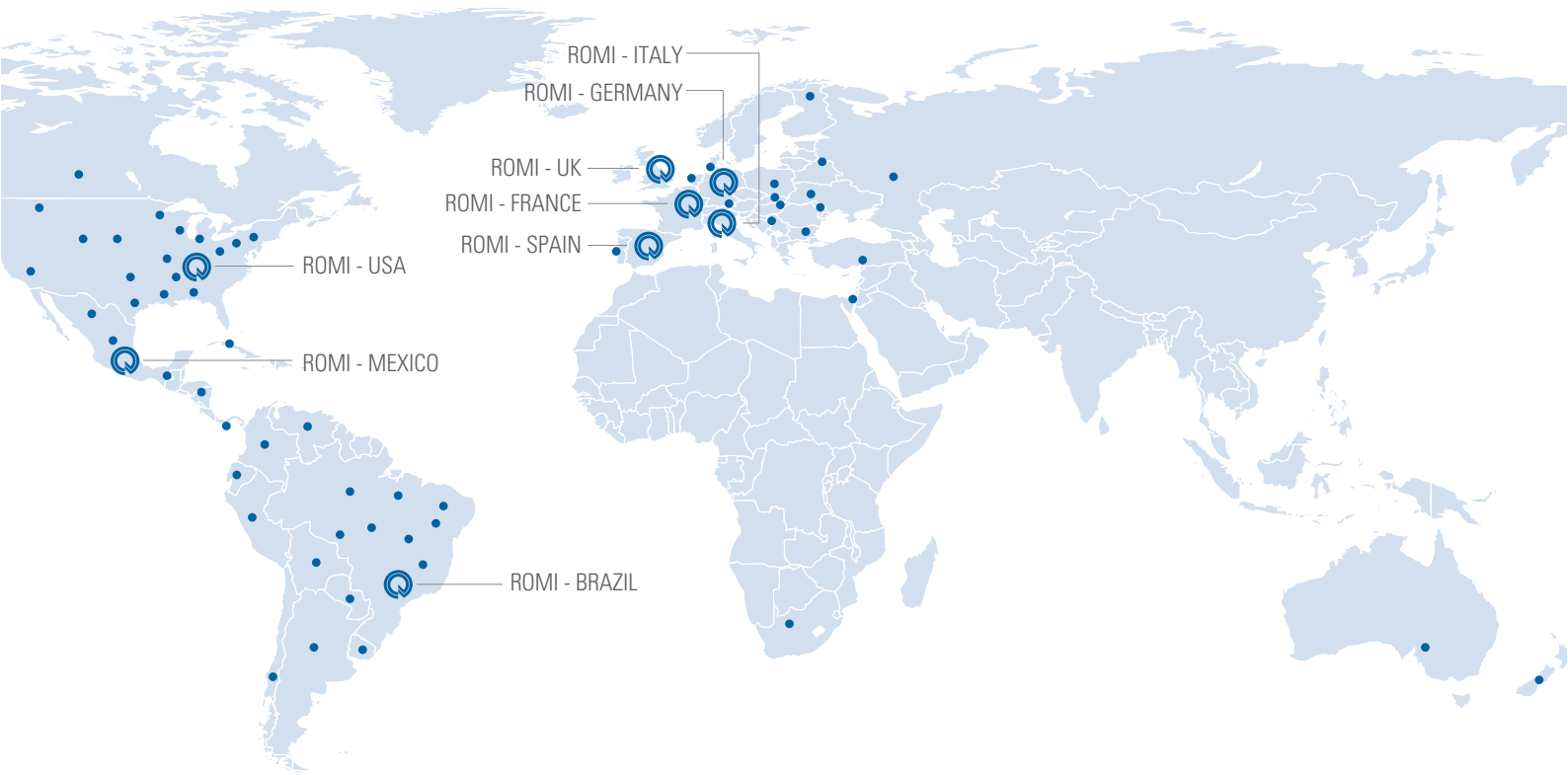- Key Speed Control of Spindle

3 - Maintenance Functions:
- Course Limits
- Security area for jaw chuck and center
- Emergency functions
- Alarm messages
- Alarm History
- Operating history
- Periodic Maintenance
- Analysis of behavior System of Servomechanism
- User support
- Diagnosis Screen
- Maintenance Screen
- Integrated Safety System via Dual Check Safety
- Power consumption monitoring

*optional   **for versions with driven tools

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